

CLAIMS

What is claimed is:

1 1. A method for managing memory in a computer system, comprising:
2 for at least one memory page,
3 dividing the page into a plurality of relocation blocks, and
4 placing the plurality of relocation blocks at a plurality of locations;
5 and
6 using a relocation table having a plurality of entries to locate the relocation
7 blocks at the plurality of locations;
8 wherein, upon a memory access, using the relocation table to convert an
9 address of the memory page to a relocation address of a relocation
10 block containing the data intended for the memory access.

1 2. The method of claim 1 further comprises the step of converting a virtual address of
2 the data to the address of the memory page.

1 3. The method of claim 1 further comprises the step of allocating the plurality of
2 relocation blocks corresponding to the memory page upon receiving the address of
3 the memory page.

1 4. The method of claim 3 further comprises the step of corresponding each entry of
2 the plurality of entries to a particular location of a relocation block.

1 5. A system for managing memory in a computer system, comprising:
 2 a plurality of relocation blocks located at a plurality of locations; wherein a
 3 set of relocation blocks is divided from a memory page;
 4 a relocation table having a plurality of entries used to locate the relocation
 5 blocks at the plurality of locations; and
 6 means for using the relocation table to convert an address of the memory
 7 page to a relocation address of a relocation block containing the
 8 data intended for a memory access.

1 6. The system of claim 5 wherein the address of the memory page was translated
 2 from a virtual address of the data.

1 7. The system of claim 5 further comprises means for allocating the plurality of
 2 relocation blocks corresponding to the memory page upon receiving the address of
 3 the memory page.

1 8. The system of claim 7 wherein each entry of the plurality of entries corresponds to
 2 a particular location of a relocation block.

1 9. A computer-readable medium embodying instructions that cause a computer to
 2 perform a method for managing memory in a computer system, the method
 3 comprising the steps of:
 4 for at least one memory page,
 5 dividing the page into a plurality of relocation blocks, and
 6 placing the plurality of relocation blocks at a plurality of locations;
 7 and

8 using a relocation table having a plurality of entries to locate the relocation
9 blocks at the plurality of locations;
10 wherein, upon a memory access, using the relocation table to convert an
11 address of the memory page to a relocation address of a relocation
12 block containing the data intended for the memory access.

1 10. The computer-readable medium of claim 9 wherein the method further comprises
2 the step of converting a virtual address of the data to the address of the memory
3 page.

1 11. The computer-readable medium of claim 9 wherein the method further comprises
2 the step of allocating the plurality of relocation blocks corresponding to the
3 memory page upon receiving the address of the memory page.

1 12. The computer-readable medium of claim 11 wherein the method further comprises
2 the step of corresponding each entry of the plurality of entries to a particular
3 location of a relocation block.